

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-18 are pending in this application. By this Amendment, Applicants have amended Claims 1-4, 10, 12-15 and 18.

In the outstanding Office Action, Claims 1-3, 9, 12-14 and 18 were rejected under 35 U.S.C. §102(b) as being anticipated by Long (U.S. Patent No. 5,986,781); Claim 18 was rejected under 35 U.S.C. §102(b) as being anticipated by Lewis (U.S. Patent No. 3,677,616); Claims 1-3, 9-10, and 11-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of King et al. (U.S. Patent No. 6,700,686, hereinafter King); and Claims 4-8 and 15-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis in view of King et al. and in further view of Bloom et al. (U.S. Patent No. 5,311,360). The specification was also objected to.

Support for the amendments to Claims 1-2 and 12-13 is found in the Specification at page 15, line 24 to page 16 line 2, for example. Support for the amendment to Claim 18 is found in the Specification at page 23, lines 14-16. Applicants respectfully submit that no new matter has been added.

Applicants have adopted the suggestion in the Office Action by amending the specification at page 32, line 2 to change “11” to “12”.

Amended Claim 1 recites “...a plurality of individual diffraction control elements configured to be moved in different directions before receiving a laser beam emitted from the laser source...” Indeed, Long does not disclose diffraction control elements that have been moved in different directions.

On the contrary, Long discloses LCD 68 as providing the desired diffraction characteristics.¹ The LCD 68 creates a diffraction grating by displaying areas of transparency and opacity.² LCD 68 does not drive apart individual diffraction control elements.

In the rejection of Claim 1 based on Lewis in view of King, the Office Action relies on Lewis to disclose “a diffraction control element.”³ Lewis does not disclose the element in amended Claim 1 that “...a plurality of individual diffraction control elements that are configured to be moved in different directions before receiving a laser beam emitted from the laser source....”

On the contrary, Lewis only discloses that modulator 27 creates certain diffracted orders of light⁴ and that transparency 41 diffracts light.⁵ The modulator 27 and the transparency 41 do not include a plurality of individual control elements that are driven apart.

Bloom also fails to disclose “...a plurality of individual diffraction control elements that are configured to be moved in different directions before receiving a laser beam emitted from the laser source...” as is recited in amended Claim 1. Bloom only discloses that elements 18 are pulled down.⁶ Elements 18 are not moved in different directions. Configuring the individual diffraction control elements to be moved in separate directions allows for a quick operating time⁷ and it makes it possible to control the diffraction condition of light resulting from combing the emergent light.⁸ Thus, the advantages offered by the claimed invention are not available in Bloom.

In view of the above noted distinctions, Applicants respectfully submit that amended Claim 1 (and its dependent Claims 2-11) patentably distinguish over all the cited references, taken alone or in proper combination.

¹ Long, col. 6, lines 53-56.

² Long, col. 6, lines 61-63.

³ Office Action, page 4.

⁴ Lewis, col. 4, lines 19-20.

⁵ Lewis, col. 3, lines 25-31.

⁶ Bloom, col. 6, lines 30-35.

⁷ Specification, page 16, lines 13-14.

⁸ Specification, page 5, lines 3-9.

Amended Claim 12, although of a different statutory class, is similar to amended Claim 1 in that it recites "...a plurality of individual diffraction control elements, including a step of moving the plurality of diffraction control elements in different directions prior to the laser beam exiting..." Applicants respectfully submit that Claim 12 (and its dependent Claims 13-17) patentably distinguishes over all the cited references, taken alone or in proper combination.

With respect to the rejection of Claim 18, Applicants respectfully submit that amended Claim 18 is no longer anticipated by Long and no longer anticipated by Lewis. Claim 18 has been amended to recite "A hologram recording medium for recording data, as changes in the recording mediums refraction index..." Long does not disclose how data is recorded into a recording medium, but since it is directed to LCD elements, it is not believed to teach a change in refractive index.

Lewis does not disclose "A hologram recording medium for recording data, as changes in the recording mediums refraction index..." as is recited in amended Claim 18. Lewis discloses detector 73. The detector does not record data, nor does it record data as changes in the recordings medium's refractive index. Lewis discloses that instead of being imaged onto a photographic film or being viewed directly, the beam is directed toward holographic detector 73.⁹

In view of the above noted distinctions, Applicants respectfully submit that amended Claim 18 patentably distinguishes over both Long and Lewis.

⁹ Office Action, col. 6, lines 66-69.

Consequently, in view of the above amendments and comments, it is respectfully submitted that the outstanding rejection is traversed and that the pending claims are in condition for allowance. An early and favorable action to that effect is respectfully requested.

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